REMARKS

The Office Action dated May 12, 2009, has been received and carefully considered. In this response, claims 26, 54, 63, 64, 69, and 73 have been amended. No new matter has been added. Entry of the amendments to claims 26, 54, 63, 64, 69, and 73 is respectfully requested. Reconsideration of the current rejections in the present application is also respectfully requested based on the following remarks.[1]

I. THE EXAMINER INTERVIEW

At the outset, the undersigned thanks the Examiner for the courtesies extended during the interview conducted on August 11, 2009. No agreement was reached with respect to the claims, however the Examiner noted that the amendments discussed with respect to proposed claim 1 would likely overcome the outstanding rejections.

[1] As Applicants' remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicants' silence as to assertions made by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., assertions regarding dependent claims, whether a reference constitutes prior art, whether references are legally combinable for obviousness purposes) is not a concession by Applicants that such assertions are accurate or such requirements have been met, and Applicants reserve the right to analyze and dispute such in the future.

II. THE OBVIOUSNESS REJECTION OF CLAIMS 26-29, 32, 38-47, 54-61, 63-65, 69, 71, AND 73

On pages 2-5 of the Office Action, claims 26-29, 32, 38-47, 54-61, 63-65, 69, 71, and 73 were rejected under 35 USC § 103(a) as being unpatentable over U.S. Publication No. 2003/0167380 ("Green") in view of U.S. Patent No. 6,598,131 ("Kedem"). This rejection is hereby respectfully traversed.

Under 35 U.S.C. § 103, the Patent Office bears the burden of establishing a prima facie case of obviousness. In re Fine, 837 F.2d 1071, 1074 (Fed. Cir. 1988). There are four separate factual inquiries to consider in making an obviousness determination: (1) the scope and content of the prior art; (2) the level of ordinary skill in the field of the invention; (3) the differences between the claimed invention and the prior art; and (4) the existence of any objective evidence, or "secondary considerations," of non-obviousness. Graham v. John Deere Co., 383 U.S. 1, 17-18 (1966); see also KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727 (2007). An "expansive and flexible approach" should be applied when determining obviousness based on a combination of prior art references. KSR, 127 S. Ct. at 1739. However, a claimed invention combining multiple known elements is not rendered obvious simply because each element was known independently in the prior art. Id. at 1741. Rather,

there must still be some "reason that would have prompted" a person of ordinary skill in the art to combine the elements in the specific way that he or she did. Id.; In re Icon Health & Fitness, Inc., 496 F.3d 1374, 1380 (Fed. Cir. 2007). Also, modification of a prior art reference may be obvious only if there exists a reason that would have prompted a person of ordinary skill to make the change. KSR, 127 S. Ct. at 1740-41.

As stated in MPEP § 2143, to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488 (Fed. Cir. 1991).

As stated in MPEP § 2143.03, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981 (CCPA 1974). That is, "[a]ll words in a claim must be

considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382 (CCPA 1970). Applicants respectfully submit that the combination of Green and Kedem fails to disclose all of the claim limitations of claims 26-29, 32, 38-47, 54-61, 63-65, 69, 71, and 73, as described more fully below.

Regarding claim 26, the Examiner asserts that the limitation "so as to accumulate backup data to restore the original data store to any point in time during the time interval. . ." is an intended use and is not to be considered for patentability. Applicants respectfully disagree. Specifically, the identified language does not constitute an intended use, but rather clearly defines the manner in which an original data store is being backed up. However, in order to forward the present application toward allowance, Applicants have amended claim 26 to more specifically define the claimed invention, and specifically those features that further differentiate the claimed invention from the cited references.

Green discloses a system and method to store and recall snapshots. The snapshots of the Green disclosure have a beginning time and an ending time. *See*, for example, Green paragraph [0076] and Figure 5:

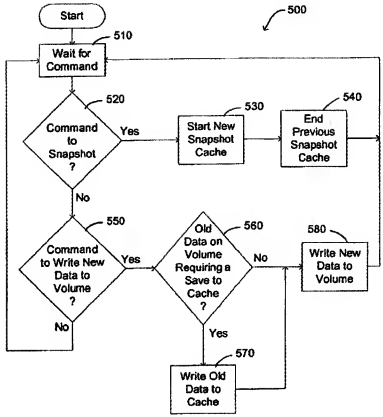

Fig. 5

As is abundantly clear by Figure 5, and explained in paragraph [0076] of the specification, snapshots do not overlap. That is, upon receiving a command to initiate a snapshot (element 520 of Figure 5), the current snapshot, if a current snapshot exists, is closed (element 540) and a new one is begun (element 530). Green does not disclose a continuous capture of historical data, only a method to "freeze" the volume at discrete time intervals within one or more snapshots.

When a volume in Green is to be reconstructed from a

snapshot, the volume may only be reconstructed to reflect its state at discrete time intervals. Paragraph [0148] discloses that a prior snapshot may be restored so that the current state of the system is made to be identical to the particular snapshot (the example is the "12:11" snapshot in [0148]). Data stored in a later snapshot can be copied from the later snapshot to the current system (the example is the "New Folder" folder in the 12:18 snapshot, which can be copied to the current state of the system at the "12:11" snapshot in paragraph [0148]). However, if the "New Folder" folder was changed at 12:15, and then again at 12:17, before it was captured in a snapshot at 12:18, the original files as they existed at 12:15 could not be restored.

Applicants respectfully submit that neither Green nor Kedem disclose, alone or in combination, disclose, or even suggest, "receiving a request to create a virtual data store that reflects a state of the primary data store at a specified time, the specified time being any point in time during the time interval, the virtual data store being created from data stored in the original data store; [and] receiving a storage protocol request for data at a specified address in the virtual data store. . .," as presently claimed. Specifically, Green and Kedem do not disclose receiving two commands, one to create a virtual data store, and another for data at a specified address

in the virtual data store. Green, as shown above, can only restore a system to defined snapshot points in time. Also, neither Green nor Kedem disclose creating a virtual data store at "any point in time during the time interval. . .," as claimed.

The Examiner notes, in response to Applicants' arguments that Green does not disclose overlapping snapshot caches or that restoration is possible at "any point in time," as recited in claim 26, that "the disclosed invention of Green would appropriately read upon the substantially continuous time interval defined in Applicant's specification." Applicants respectfully disagree for at least the reasons advanced in Applicants' August 21, 2008 Response, incorporated herein by reference, and again note that support for the limitation "any point in time" in claim 26 may be found at least at, for example and without limitation, paragraph [0083] ("Further, the storage management device 38 can provide a virtual volume from any time in the substantially continuous time interval, "Substantially" continuous because of the quantization limits defined by the minimum time increment.); [0011] ("The present invention addresses the shortcomings of current systems by facilitating the recovery of data at any prior point in time, even when the request is made at a time following the recovery time.") It is

clear that the continuous time interval is limited only by the "quantization limits defined by the minimum time increment." Specification, [0083].

Regarding claims 27-29, 32, and 38-47, these claims are dependent upon independent claim 26. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071 (Fed. Cir. 1988). Thus, since independent claim 26 should be allowable as discussed above, claims 27-29, 32, and 38-47 should also be allowable at least by virtue of their dependency on independent claim 26. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination. For example, claim 28 recites that "the original data store comprises a current store and a time store." Green and Kedem, either alone or in combination, fail to disclose or suggest this claimed feature.

Regarding claims 54, 63, 64, 69, and 73, these claims, while of differing scope and of different scope than claim 26, recite subject matter related to claim 26. Thus, the arguments set forth above with respect to claim 26 are equally applicable to claims 54, 63, 64, 69, and 73. Accordingly, is it respectfully submitted that claims 54, 63, 64, 69, and 73 are

allowable over Green and Kedem for the same reasons as set forth above with respect to claim 26.

Regarding claims 55-61 and 65, these claims are dependent upon independent claims 54 and 64, respectively. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071 (Fed. Cir. 1988). Thus, since independent claims 54 and 64 should be allowable as discussed above, claims 55-61 and 65 should also be allowable at least by virtue of their dependency on independent claims 54 and 64, respectively. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination. For example, claim 59 recites "[t]he method of claim 58 wherein the original data store is implemented as a current store and a time store." Green and Kedem, either alone or in combination, fail to disclose or suggest this claimed feature.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 26-29, 32, 38-47, 54-61, 63-65, 69, 71, and 73 be withdrawn.

III. THE OBVIOUSNESS REJECTION OF CLAIMS 30, 31, 33-37, 48-53, 62, 66-68, 70, and 72

On pages 6-9 of the Office Action, claims 30, 31, 33-37, 48-53, 62, 66-68, 70, and 72 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Green in view of Kedem, and in further view of Official Notice. The Examiner has provided additional guidance on what the Examiner takes as Official Notice with regard to claims 30, 31, 33-37, 48-53, 62, 66-68, 70, and 72, however Applicants continue to respectfully traverse the rejections of claims 30, 31, 33-37, 48-53, 62, 66-68, 70, and 72 in relying on Official Notice. Applicants respectfully submit that the rejections under Green and Kedem and Official Notice are moot, given the above arguments with respect to the independent claims. Applicants reserve the right to respond to the specific Official Notice findings at a later time.

Regarding claims 30, 31, 33-37, and 48-53, these claims are dependent upon independent claim 26. Regarding claim 62, this claim is dependent upon independent claim 54. Regarding claims 66-68, these claims are dependent upon independent claim 63. Regarding claims 70 and 72, these claims are dependent upon independent claim 69. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071 (Fed. Cir. 1988). Thus,

since at least independent claims 26, 54, 63, and 69 should be allowable as discussed above, dependent claims 30, 31, 33-37, 48-53, 62, 66-68, 70, and 72 should also be allowable at least by virtue of their dependency the independent claims noted above. In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims 30, 31, 33-37, 48-53, 62, 66-68, 70, and 72 be withdrawn.

IV. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0206, and please credit any excess fees to the same deposit account.

Respectfully submitted,

Hunton & Williams LLP

By: _____
Thomas E. Anderson
Registration No. 37,063

TEA:JBB/tmf

Hunton & Williams LLP
1900 K Street, N.W.
Washington, D.C. 20006-1109
Telephone: (202) 955-1500
Facsimile: (202) 778-2201

Date: 8/12/09